Patent Application ATM-515 (7486)

- (Original) The process according to claim 1, wherein said cyclosiloxane precursor comprises the formula [RR'Si-O]_n, wherein each of R and R' is same or different and independently selected from the group consisting of hydrogen, hydroxyl, C₁-C₈ alkyl, C₁-C₈ alkoxy, C₁-C₈ alkene, C₁-C₈ alkyne, and C₁-C₈ carboxyl; and n is from 2 to 8.
- 6. (Original) The process according to claim 1, wherein the cyclosiloxane precursor is selected from the group consisting of polyhedral oligomeric silsesquioxanes (POSS), octamethylcyclotetrasiloxane (OMCTS), hexamethylcyclotetrasiloxane (HMCTS), tetramethylcyclotetrasiloxane (TMCTS), and mixtures thereof.
- (Original) The process according to claim 1, wherein the cyclosiloxane precursor is 1,3,5,7tetramethylcyclotetrasiloxane.
- 8. (Cancelled).
- 9. (Currently amended) The process according to claim 1, wherein said adsorbent bed material is selected from the group consisting of: silica gel, molecular sieves, aluminum oxide, and carbon in step (b), said cyclosiloxane precursor is treated by:

contacting the cyclosiloxane precursor with an adsorbent bed material to produce said purified cyclosiloxane precursor; and

removing the purified cyclosiloxane precursor from the adsorbent bed material.

- 10. (Currently amended) The process according to claim 4 9, wherein said adsorbent bed material is selected from the group consisting of: silica gel, molecular sieves, aluminum oxide, carbon, calcium oxide, calcium chloride, sodium sulfate, magnesium perchlorate, phosphorus pentoxide, silacide, metals, and metal hydrides calcium hydride.
- 11. (Currently amended) The process according to claim 1 9, wherein the adsorbent bed material is calcium oxide.
- 12. (Currently amended) The process according to claim 1 9, wherein the adsorbent bed material is calcium hydride.

- 13. (Currently amended) The process according to claim 4 9, wherein the adsorbent bed material comprises a combination of adsorbents.
- 14. (Currently amended) The process according to claim 4 9, wherein the cyclosiloxane precursor is further contacted with adsorbent bed material further comprises a second adsorbent bed material.
- 15. (Currently amended) The process according to claim 1 2, wherein said purified cyclosiloxane precursor is removed from said adsorbent bed material by distillation.
- 16. (Currently amended) The process according to claim 4 2, wherein said purified cyclosiloxane precursor is removed from said adsorbent bed material by decantation.
- 17. (Currently amended) The process according to claim 4 9, wherein said purified cyclosiloxane precursor is removed from said adsorbent bed material by pump.
- (Currently amended) The process according to claim 2 1, wherein the level of the at least one impurity in the said purified cyclosiloxane precursor is reduced to comprises less than < 0.001% of the at least one impurity.</p>
- 19. (Currently amended) The process according to claim 2 1, wherein the level of the at least one impurity in the said purified cyclosiloxane precursor is reduced to comprises less than < 0.00001 % of the at least one impurity.</p>
- 20. (Cancelled).
- 21. (Currently amended) The process according to claim 2 1, wherein the level of water in the said purified cyclosiloxane precursor is reduced to comprises less than < 0.00001% water.
- 22-46. (Canceled).